S01 P0564

FIG.1

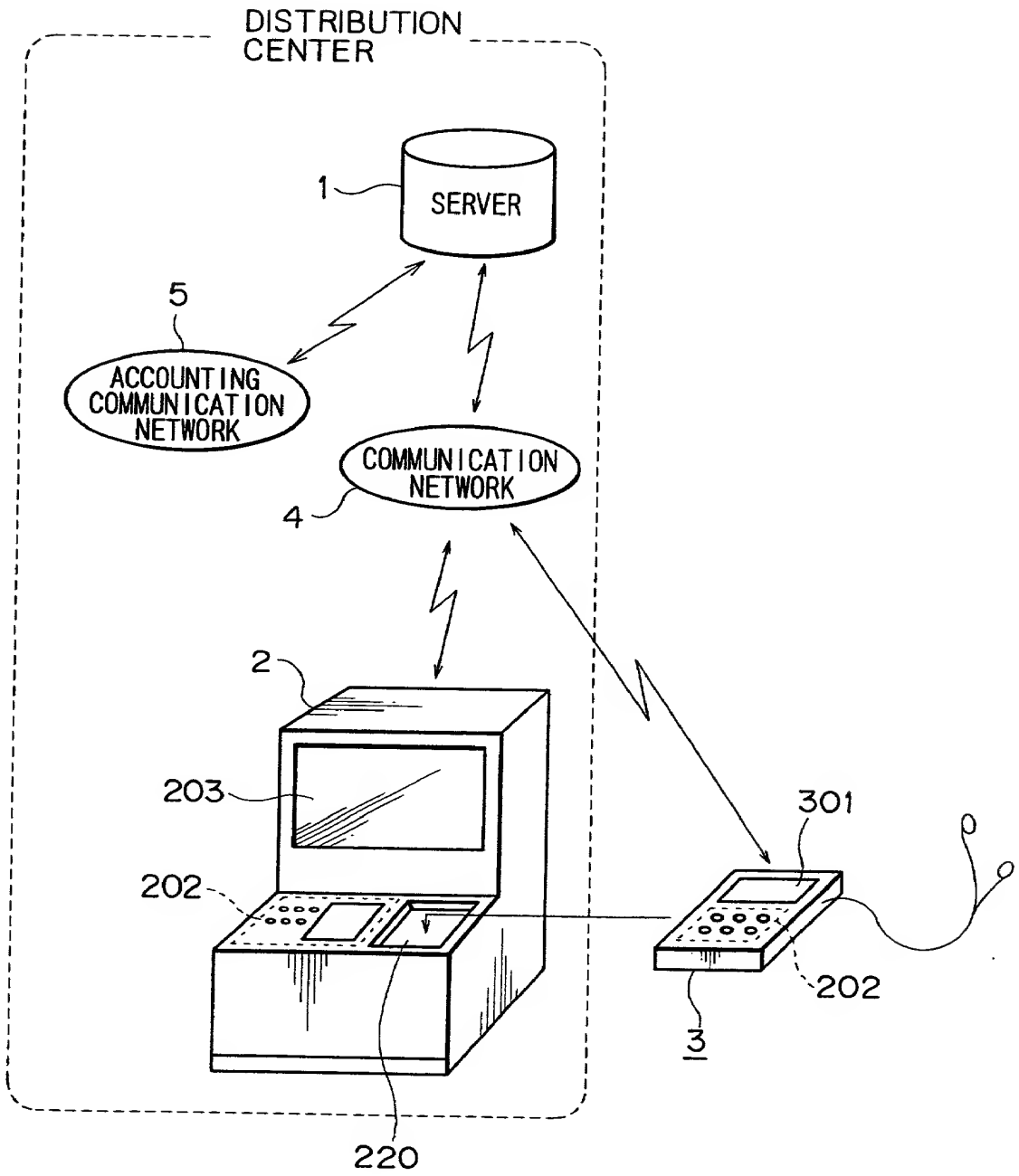


FIG. 2

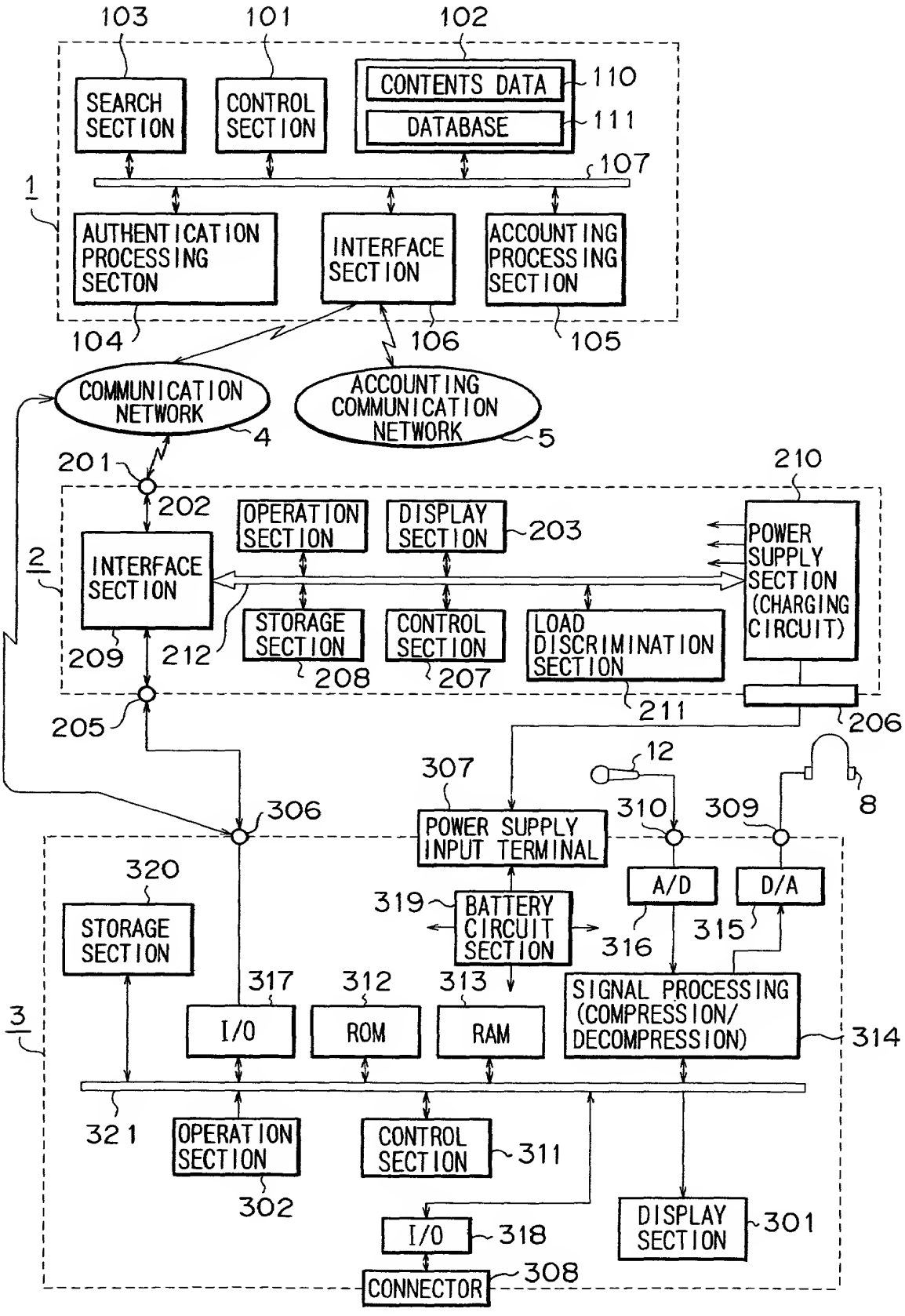

103
101
102
SEARCH SECTION
CONTROL SECTION
CONTENTS DATA
110
DATABASE
111
107
1
AUTHENTICATION PROCESSING SECTON
INTERFACE SECTION
ACCOUNTING PROCESSING SECTION
104
106
105
COMMUNICATION NETWORK
4
ACCOUNTING COMMUNICATION NETWORK
5
201
210
202
OPERATION SECTION
DISPLAY SECTION
203
2
INTERFACE SECTION
POWER SUPPLY SECTION (CHARGING CIRCUIT)
STORAGE SECTION
CONTROL SECTION
LOAD DISCRIMINATION SECTION
209
212
208
207
211
205
206
307
12
306
310
309
8
POWER SUPPLY INPUT TERMINAL
320
A/D
D/A
319
BATTERY CIRCUIT SECTION
STORAGE SECTION
316
315
317
312
313
SIGNAL PROCESSING (COMPRESSION/ DECOMPRESSION)
314
3
I/O
ROM
RAM
321
OPERATION SECTION
CONTROL SECTION
311
302
I/O
318
DISPLAY SECTION
301
CONNECTOR
308

FIG. 3A

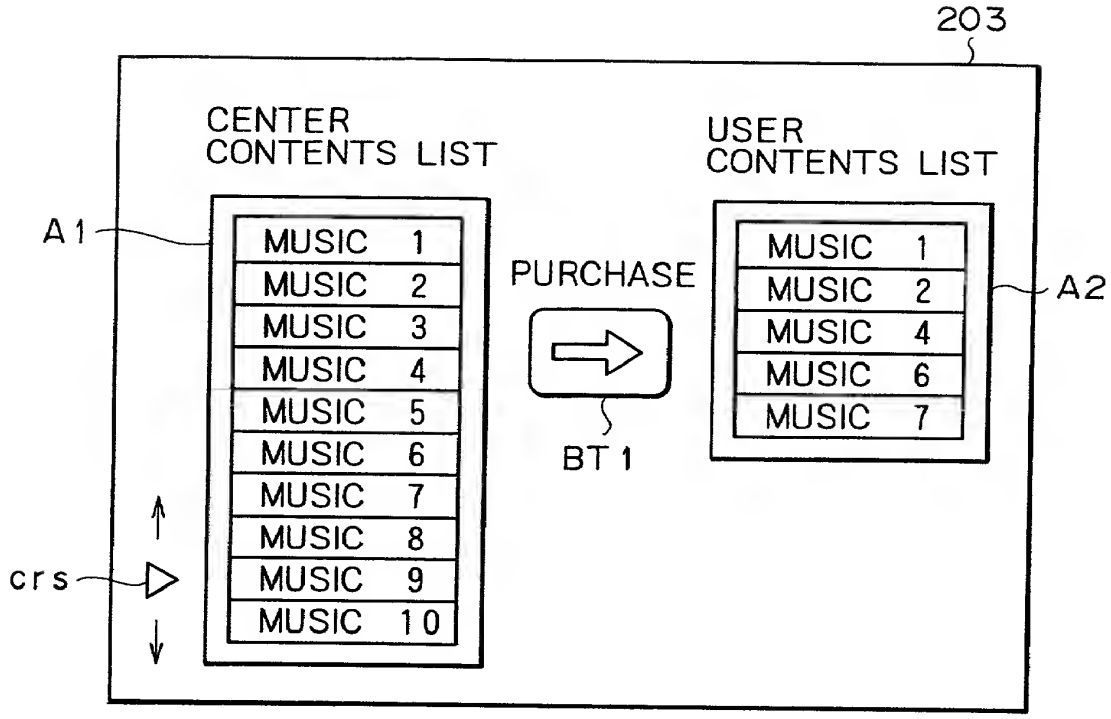

203
CENTER CONTENTS LIST
USER CONTENTS LIST
A1
MUSIC 1
MUSIC 2
MUSIC 3
MUSIC 4
MUSIC 5
MUSIC 6
MUSIC 7
MUSIC 8
MUSIC 9
MUSIC 10
PURCHASE
BT1
MUSIC 1
MUSIC 2
MUSIC 4
MUSIC 6
MUSIC 7
A2
crs

FIG. 3B

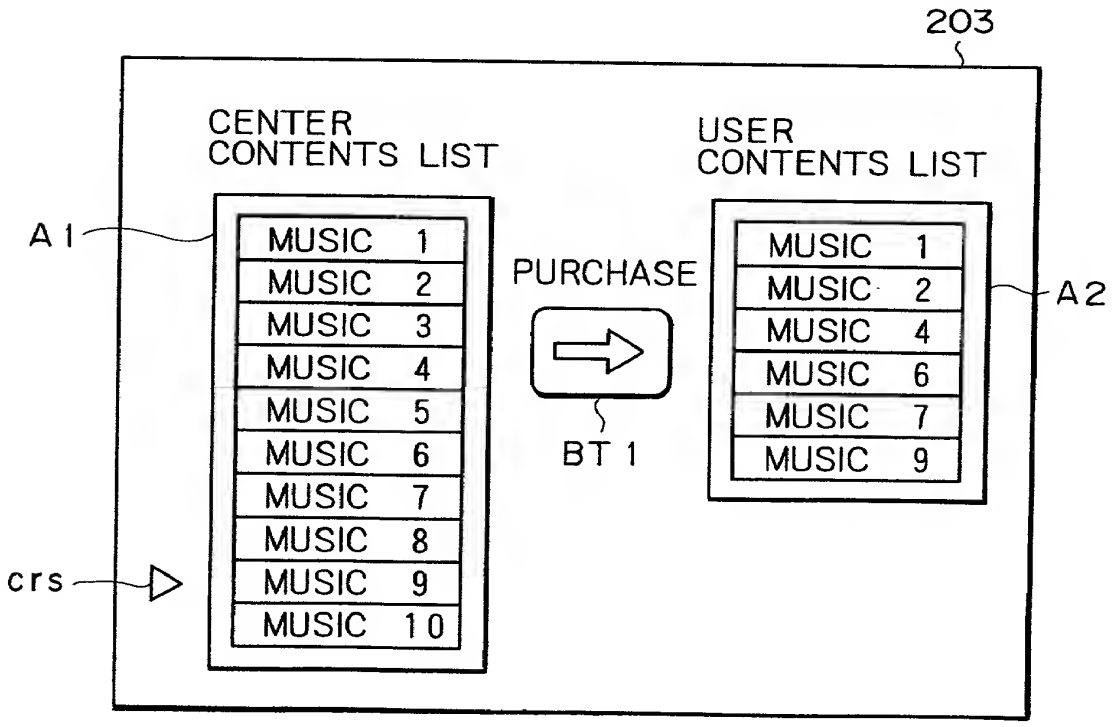
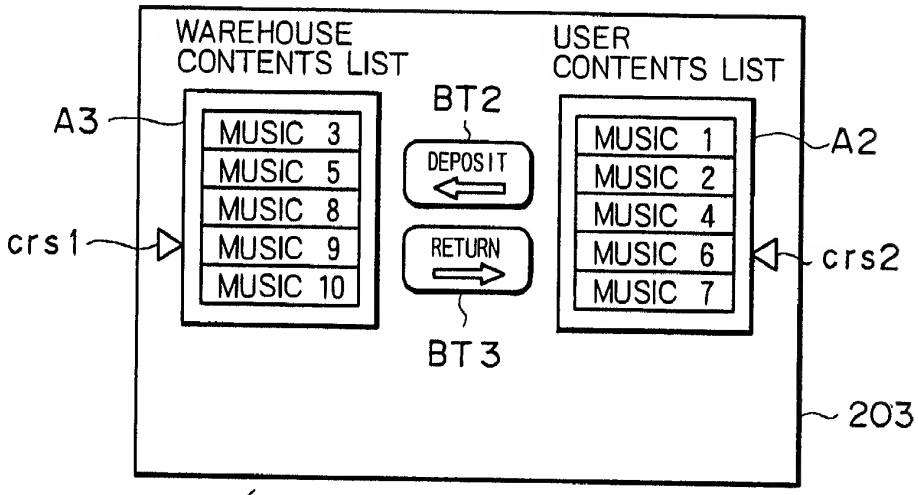

203
CENTER CONTENTS LIST
USER CONTENTS LIST
A1
MUSIC 1
MUSIC 2
MUSIC 3
MUSIC 4
MUSIC 5
MUSIC 6
MUSIC 7
MUSIC 8
MUSIC 9
MUSIC 10
PURCHASE
BT1
MUSIC 1
MUSIC 2
MUSIC 4
MUSIC 6
MUSIC 7
MUSIC 9
A2
crs

FIG.4A



DEPOSIT OF CONTENTS

RETURN OF CONTENTS

FIG.4B

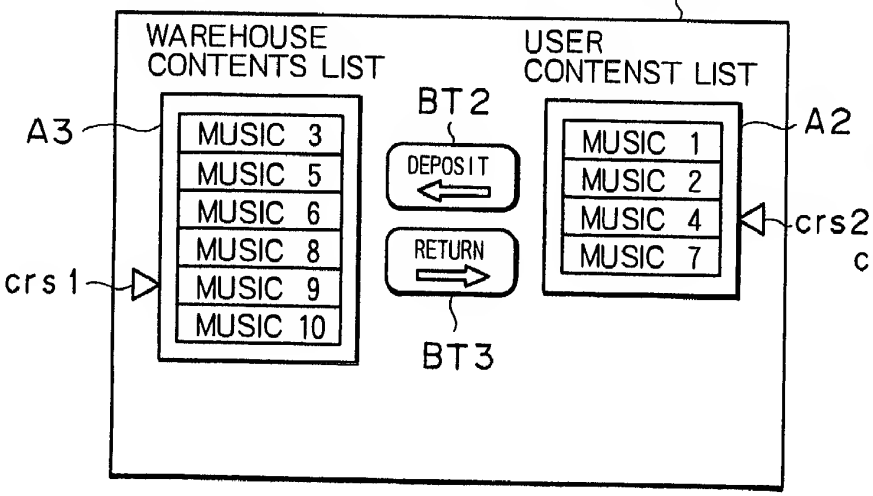


FIG.4C

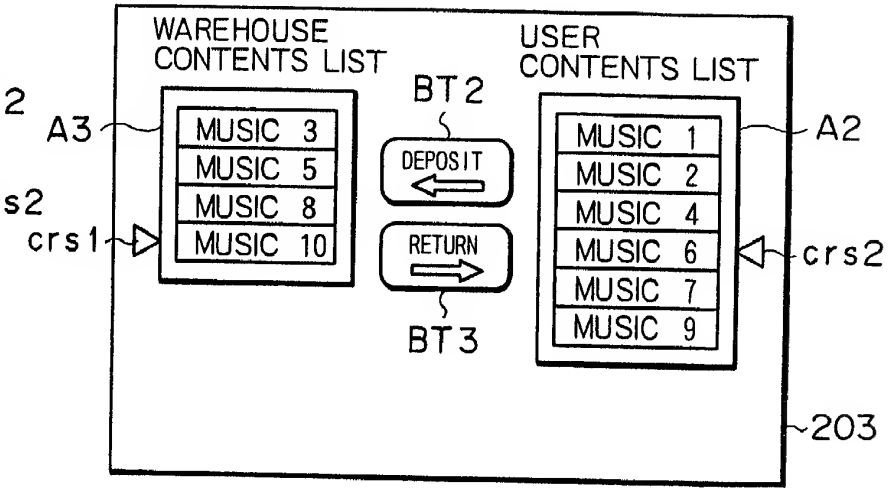


FIG.5

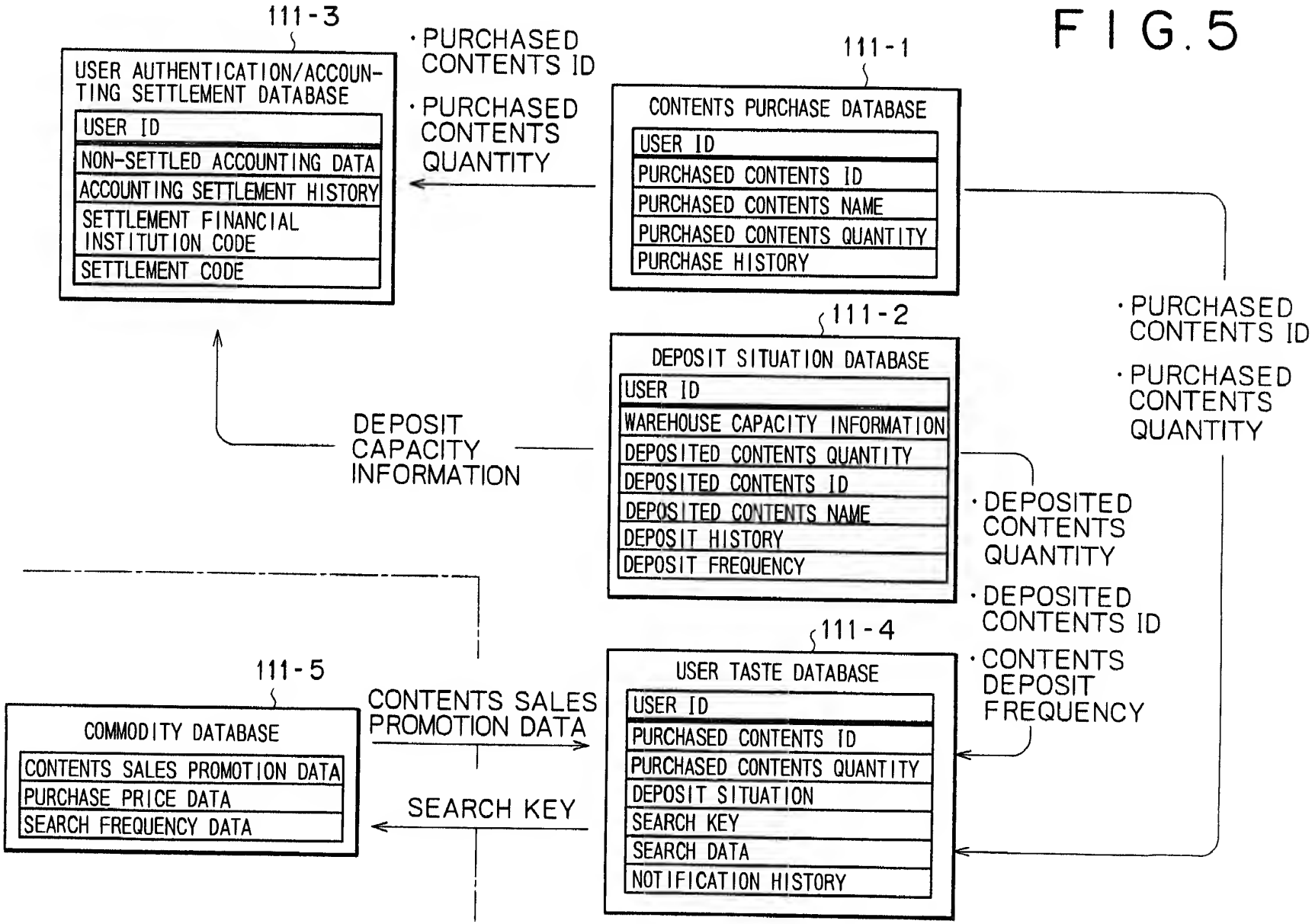
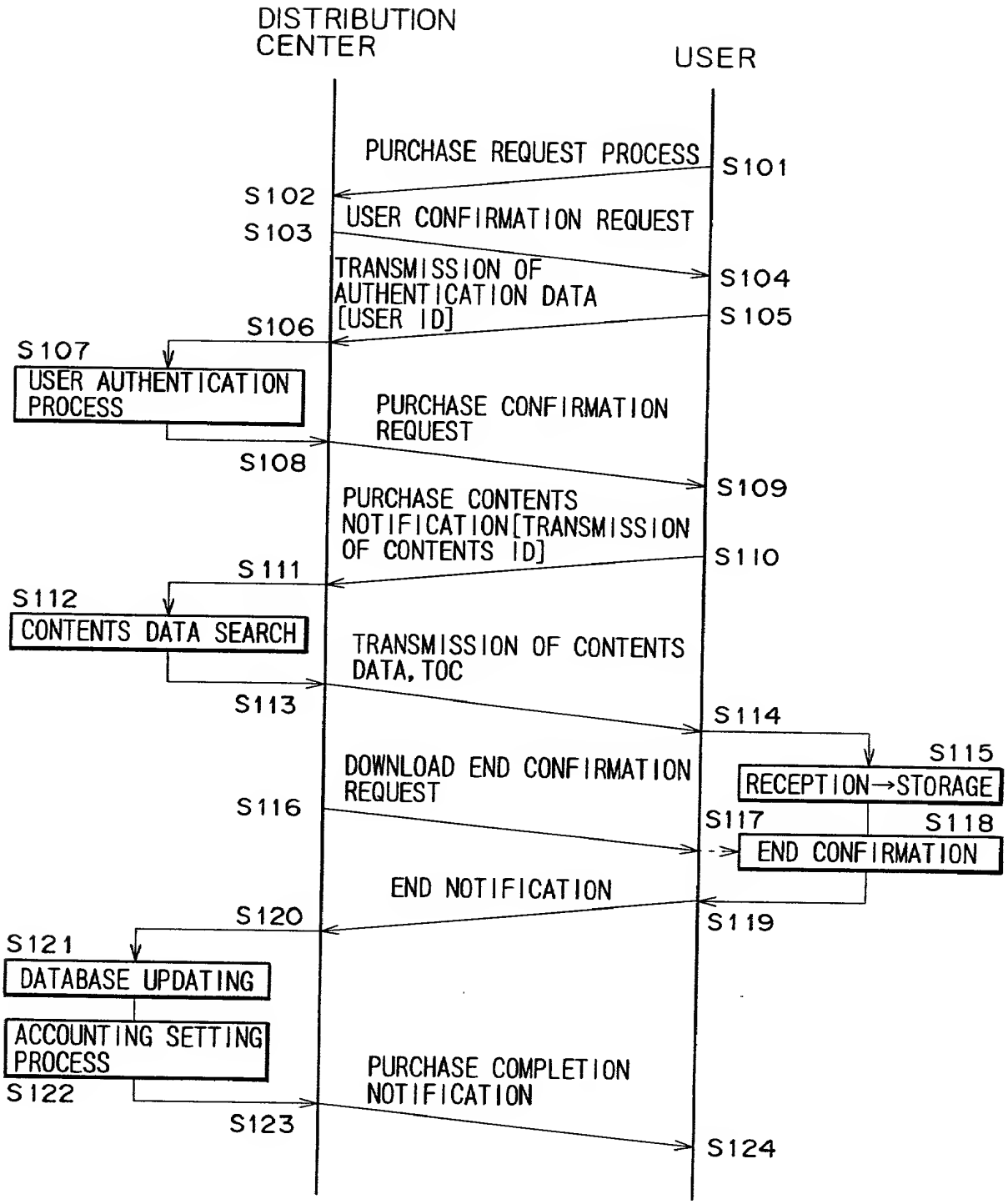
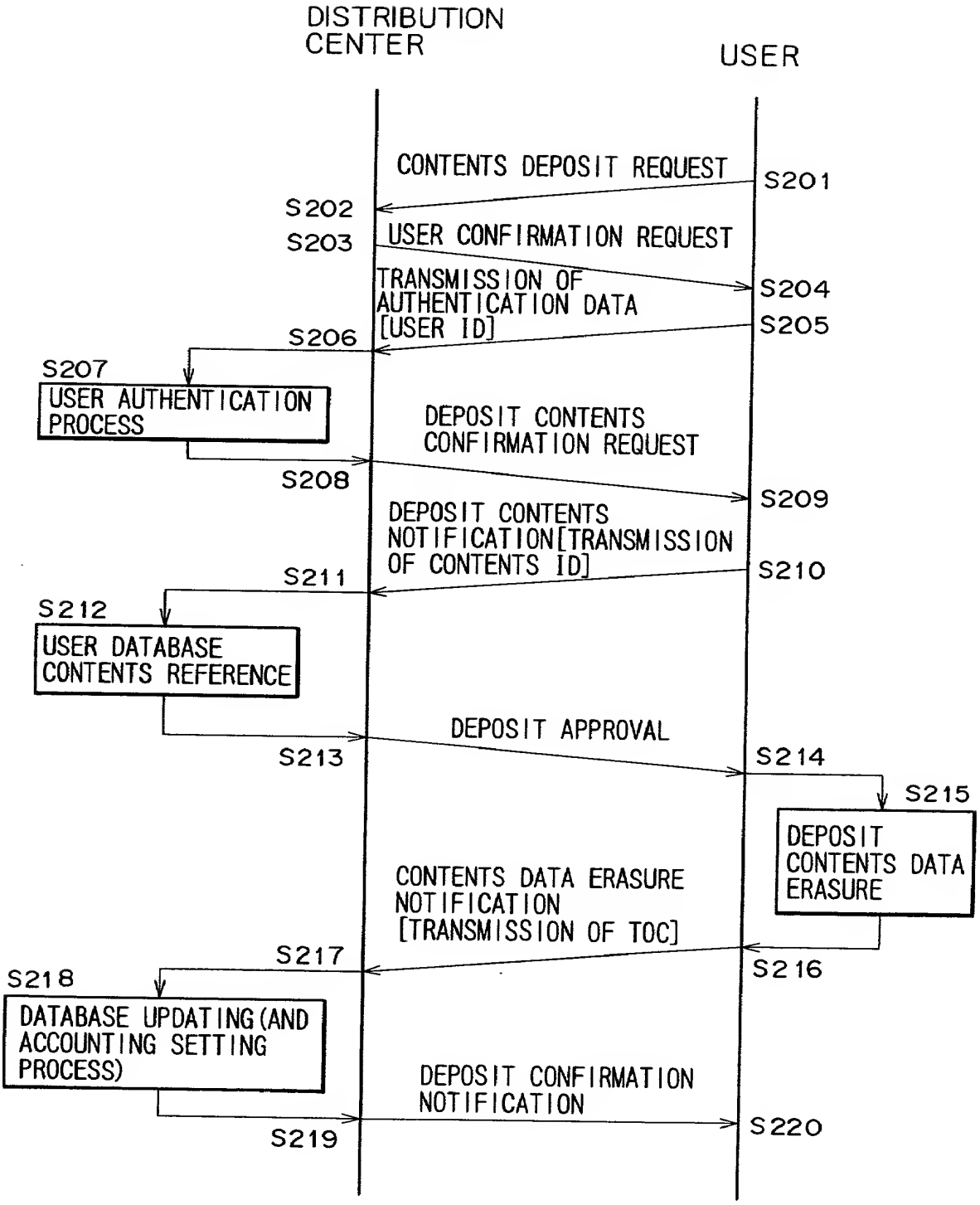

111-3
USER AUTHENTICATION/ACCOUNTING SETTLEMENT DATABASE
USER ID
NON-SETTLED ACCOUNTING DATA
ACCOUNTING SETTLEMENT HISTORY
SETTLEMENT FINANCIAL INSTITUTION CODE
SETTLEMENT CODE
・PURCHASED CONTENTS ID
・PURCHASED CONTENTS QUANTITY
111-1
CONTENTS PURCHASE DATABASE
USER ID
PURCHASED CONTENTS ID
PURCHASED CONTENTS NAME
PURCHASED CONTENTS QUANTITY
PURCHASE HISTORY
・PURCHASED CONTENTS ID
・PURCHASED CONTENTS QUANTITY
111-2
DEPOSIT SITUATION DATABASE
USER ID
WAREHOUSE CAPACITY INFORMATION
DEPOSITED CONTENTS QUANTITY
DEPOSITED CONTENTS ID
DEPOSITED CONTENTS NAME
DEPOSIT HISTORY
DEPOSIT FREQUENCY
DEPOSIT CAPACITY INFORMATION
・DEPOSITED CONTENTS QUANTITY
・DEPOSITED CONTENTS ID
・CONTENTS DEPOSIT FREQUENCY
111-4
USER TASTE DATABASE
USER ID
PURCHASED CONTENTS ID
PURCHASED CONTENTS QUANTITY
DEPOSIT SITUATION
SEARCH KEY
SEARCH DATA
NOTIFICATION HISTORY
111-5
COMMODITY DATABASE
CONTENTS SALES PROMOTION DATA
PURCHASE PRICE DATA
SEARCH FREQUENCY DATA
CONTENTS SALES PROMOTION DATA
SEARCH KEY

FIG. 6



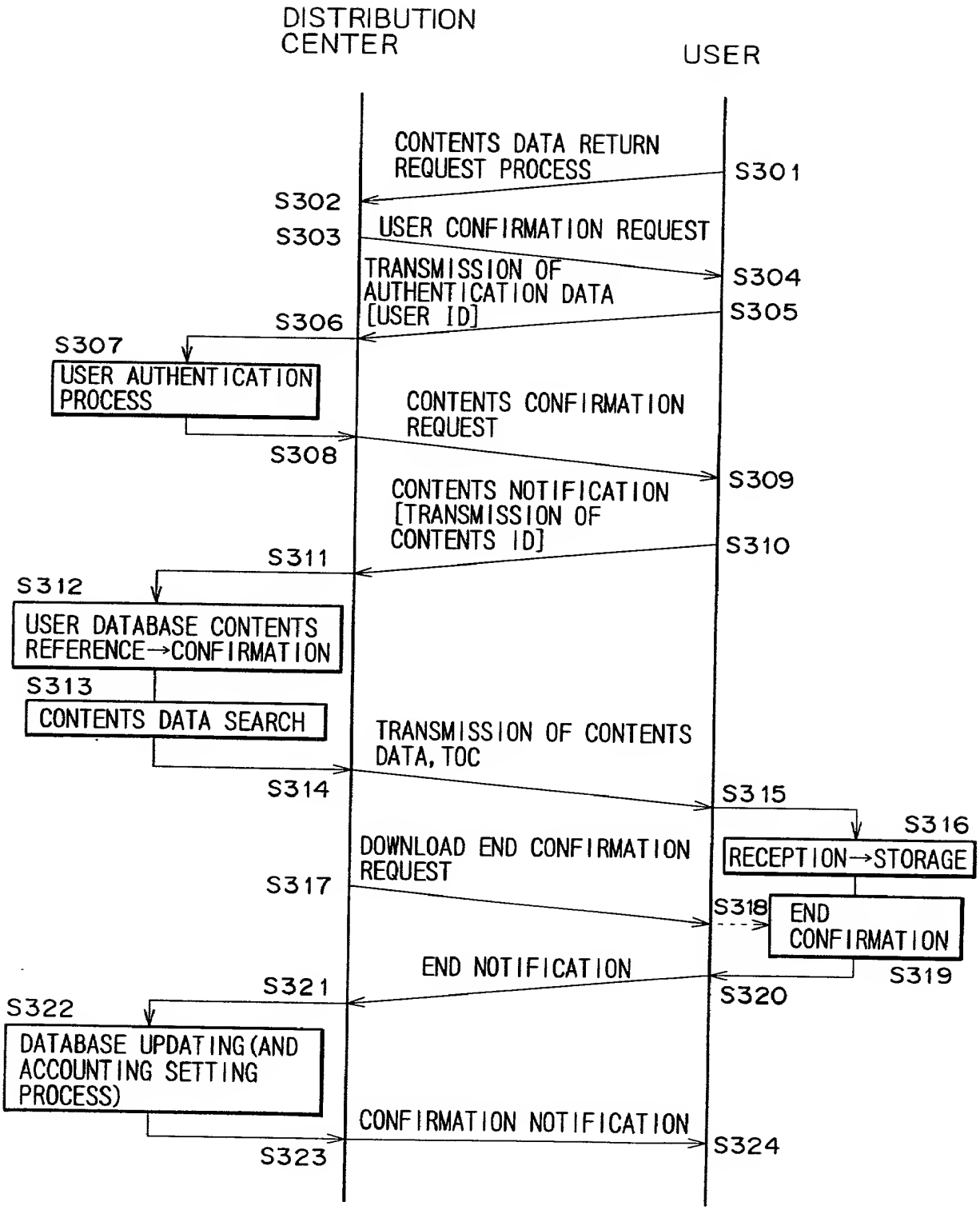
CONTENTS (TUNERIGHT) PURCHASE PROCESS

FIG.7



CONTENTS DEPOSIT PROCESS

FIG. 8



CONTENTS RETURN PROCESS

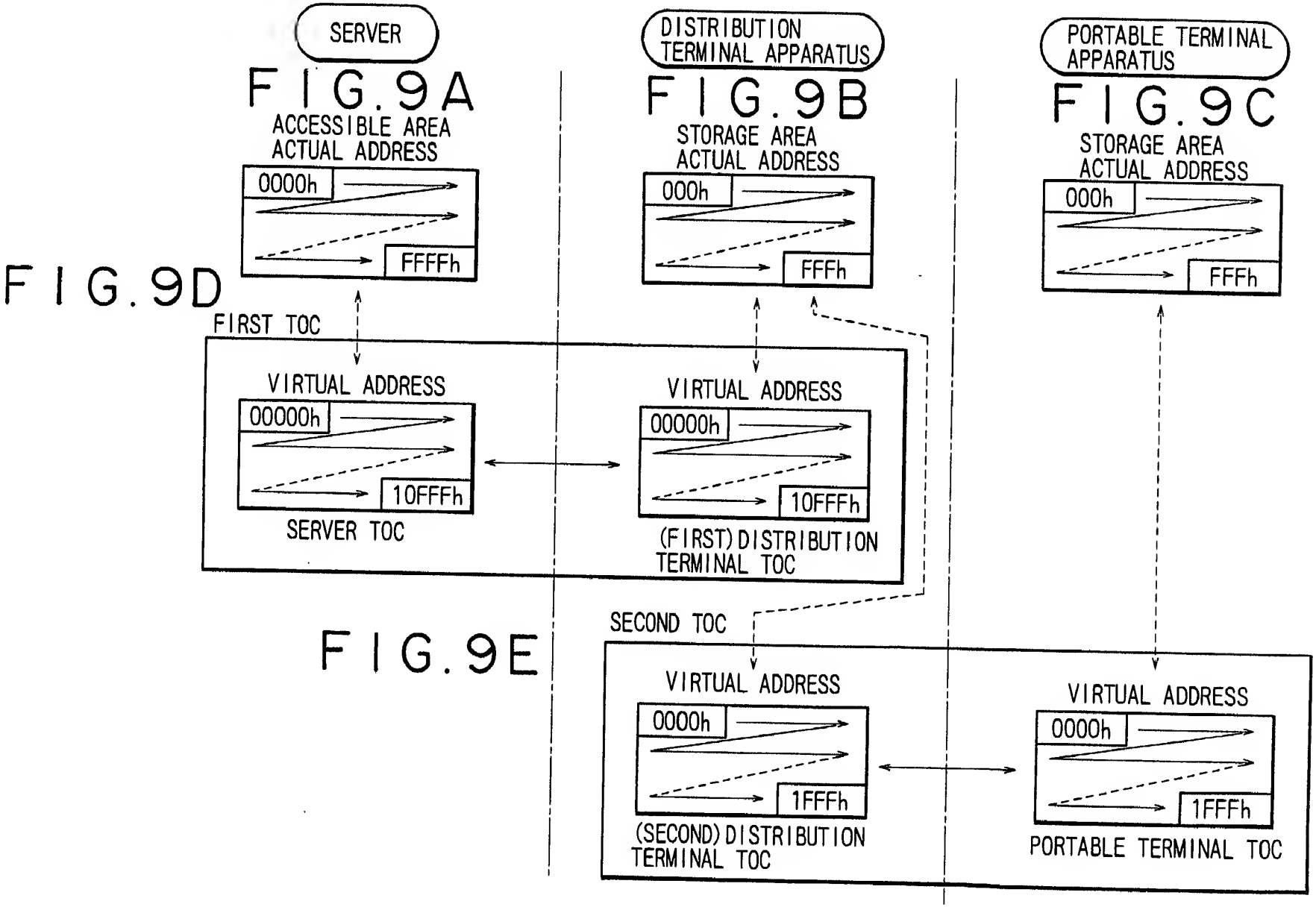


FIG.9A

FIG.9B

FIG.9C

FIG.9D

FIG.9E

FIG.10

STRUCTURE OF FIRST TOC

USER ID			
SERVER ID		DISTRIBUTION TERMINAL ID	
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS

SERVER TOC

(FIRST) DISTRIBUTION TERMINAL TOC

FIG.11

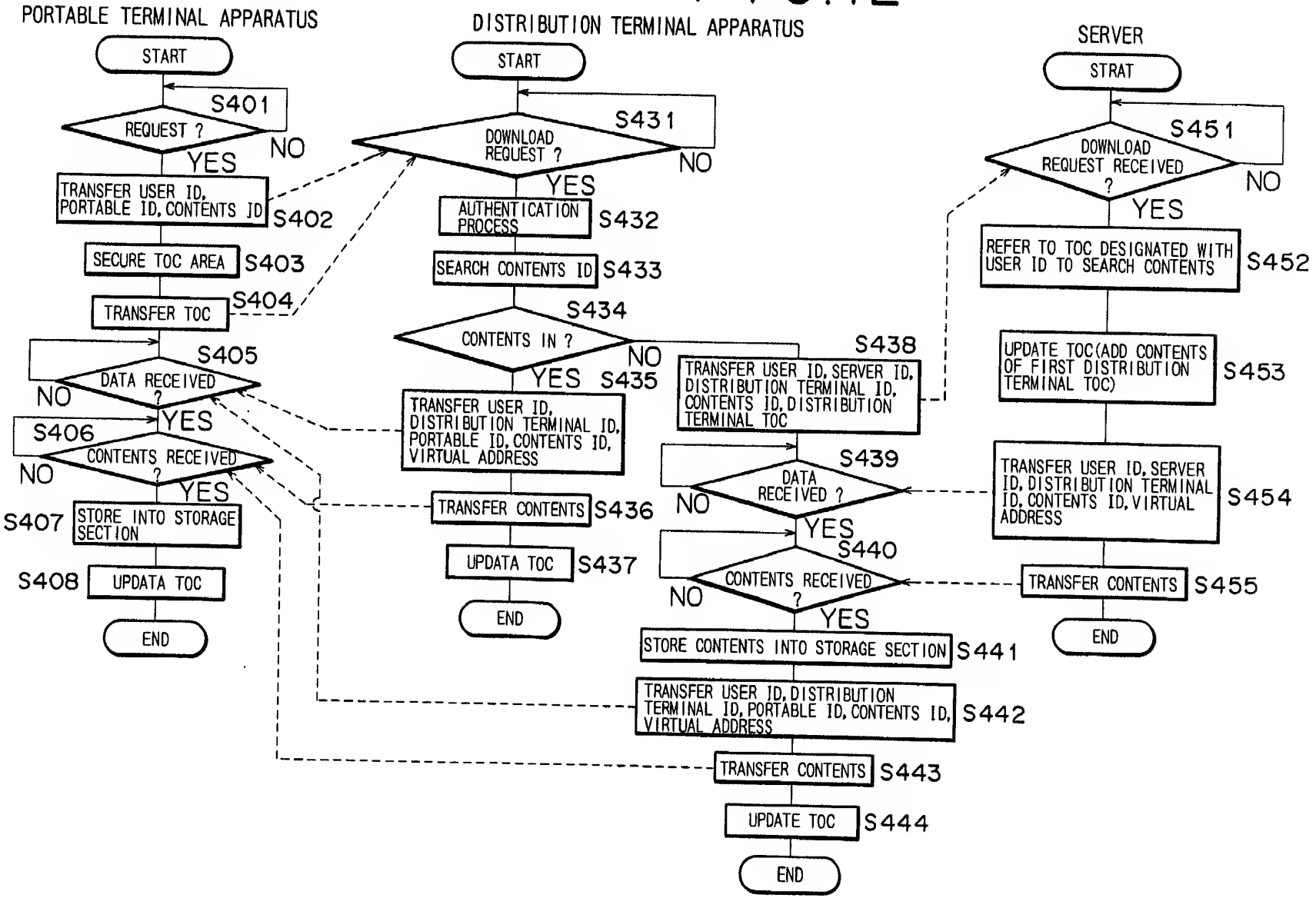
STRUCTURE OF SECOND TOC

USER ID			
DISTRIBUTION TERMINAL ID		PORTABLE TERMINAL ID	
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS

(SECOND) DISTRIBUTION TERMINAL TOC

PORTABLE TERMINAL TOC

FIG.12


PORTABLE TERMINAL APPARATUS
START
S401
REQUEST ?
NO
YES
TRANSFER USER ID, PORTABLE ID, CONTENTS ID
S402
SECURE TOC AREA
S403
TRANSFER TOC
S404
S405
DATA RECEIVED ?
NO
YES
S406
CONTENTS RECEIVED ?
NO
YES
S407
STORE INTO STORAGE SECTION
S408
UPDATA TOC
END
DISTRIBUTION TERMINAL APPARATUS
START
S431
DOWNLOAD REQUEST ?
NO
YES
AUTHENTICATION PROCESS
S432
SEARCH CONTENTS ID
S433
S434
CONTENTS IN ?
NO
YES
S435
TRANSFER USER ID, DISTRIBUTION TERMINAL ID, PORTABLE ID, CONTENTS ID, VIRTUAL ADDRESS
TRANSFER CONTENTS
S436
UPDATA TOC
S437
END
S438
TRANSFER USER ID, SERVER ID, DISTRIBUTION TERMINAL ID, CONTENTS ID, DISTRIBUTION TERMINAL TOC
S439
DATA RECEIVED ?
NO
YES
S440
CONTENTS RECEIVED ?
NO
YES
STORE CONTENTS INTO STORAGE SECTION
S441
TRANSFER USER ID, DISTRIBUTION TERMINAL ID, PORTABLE ID, CONTENTS ID, VIRTUAL ADDRESS
S442
TRANSFER CONTENTS
S443
UPDATE TOC
S444
END
SERVER
STRAT
S451
DOWNLOAD REQUEST RECEIVED ?
NO
YES
REFER TO TOC DESIGNATED WITH USER ID TO SEARCH CONTENTS
S452
UPDATE TOC(ADD CONTENTS OF FIRST DISTRIBUTION TERMINAL TOC)
S453
TRANSFER USER ID, SERVER ID, DISTRIBUTION TERMINAL ID, CONTENTS ID, VIRTUAL ADDRESS
S454
TRANSFER CONTENTS
S455
END

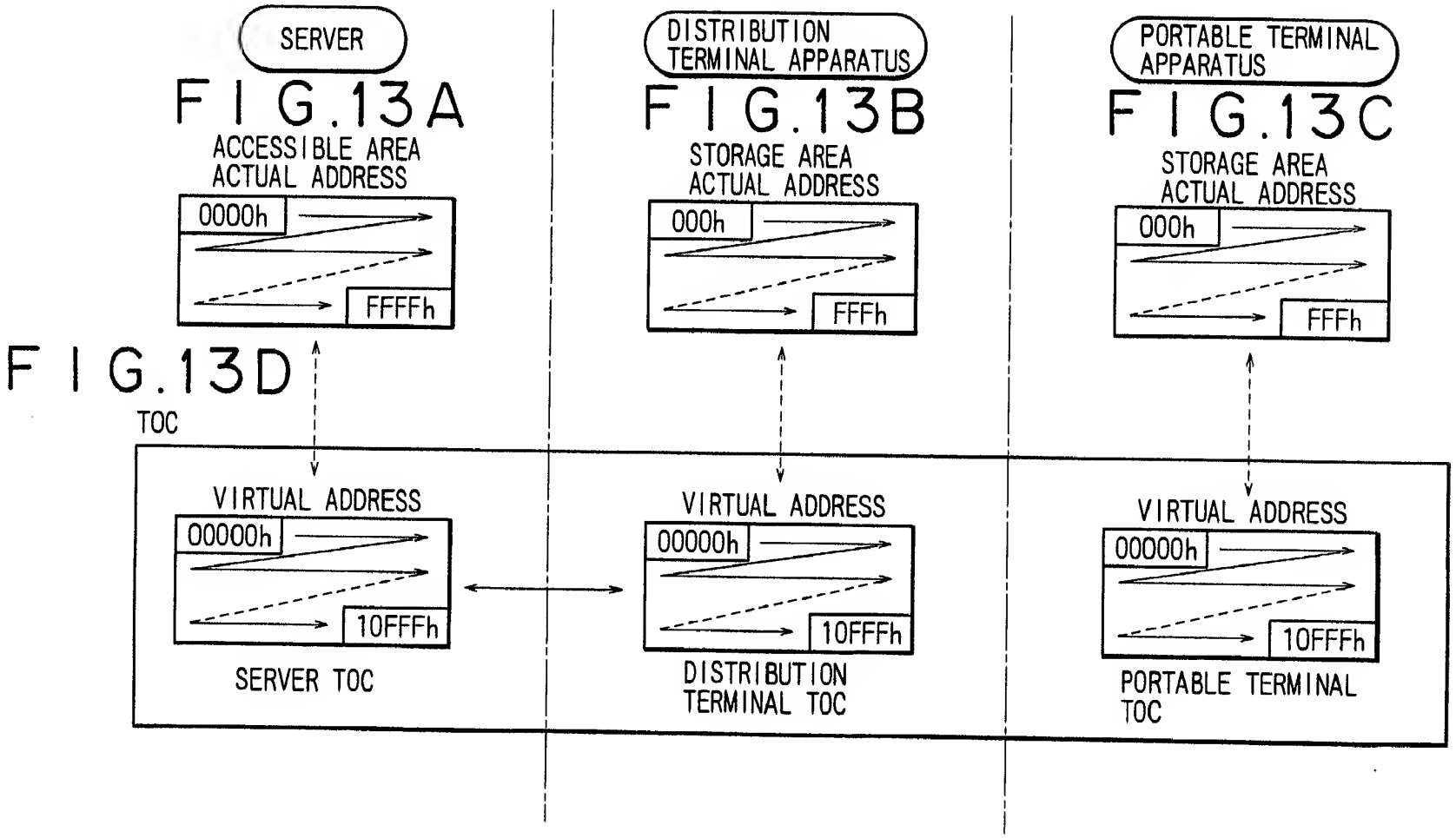


FIG.13A

FIG.13B

FIG.13C

FIG.13D

FIG. 14

STRUCTURE OF TOC

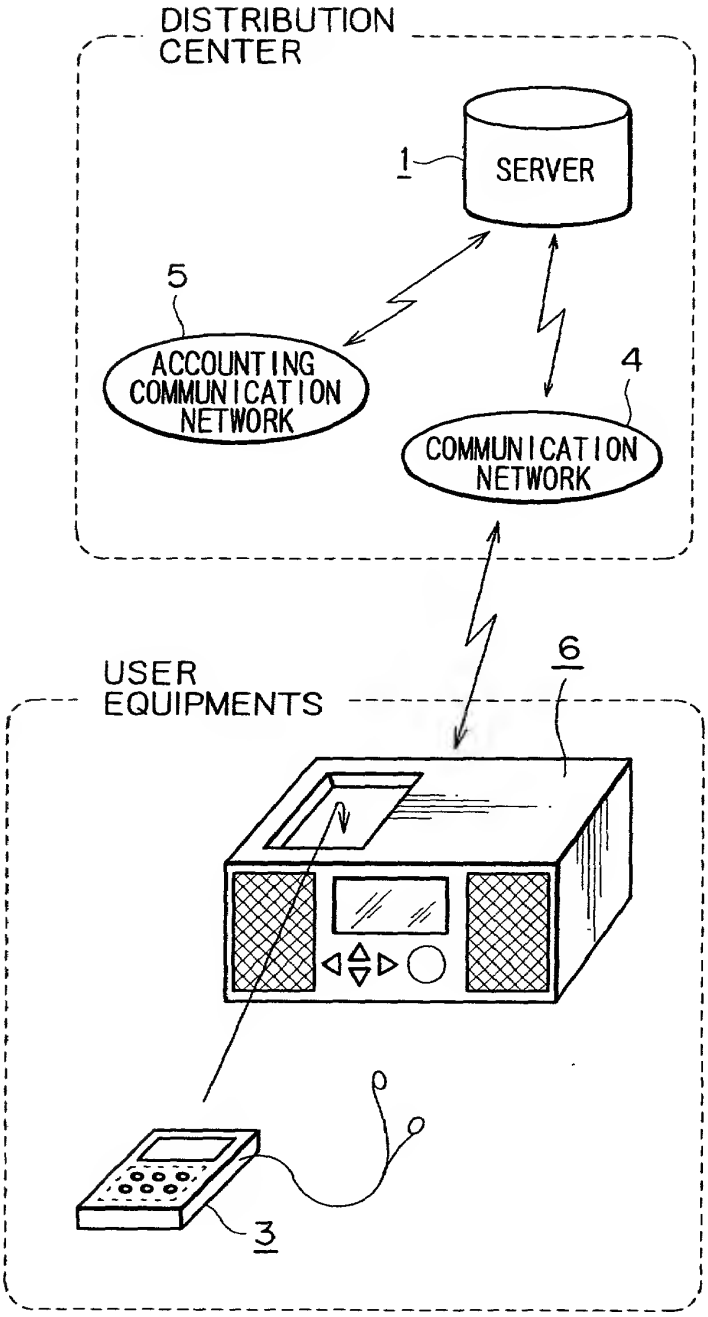
USER ID					
SERVER ID		DISTRIBUTION TERMINAL ID		PORTABLE TERMINAL ID	
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS
CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS	CONTENTS ID	VIRTUAL ADDRESS

SERVER TOC

DISTRIBUTION TERMINAL TOC

PORTABLE TERMINAL TOC

F I G.15


DISTRIBUTION CENTER
1
SERVER
5
ACCOUNTING COMMUNICATION NETWORK
4
COMMUNICATION NETWORK
6
USER EQUIPMENTS
3